Gembch, S.
10/621966

FILE 'REGISTRY' ENTERED AT 12:16:02 ON 13 JAN 2006

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JAN 2006 HIGHEST RN 871792-80-2
DICTIONARY FILE UPDATES: 11 JAN 2006 HIGHEST RN 871792-80-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

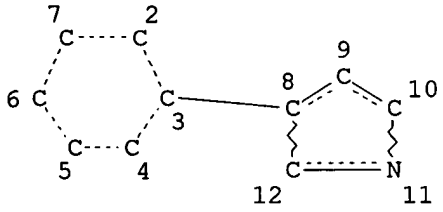
****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

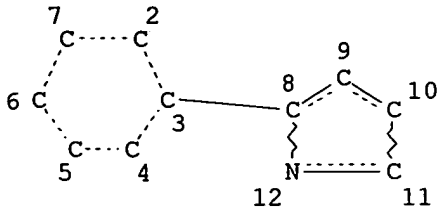
L1 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

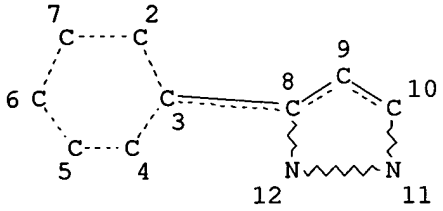
STEREO ATTRIBUTES: NONE
L2 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

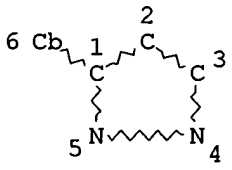
STEREO ATTRIBUTES: NONE
L3 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L4 (82088)SEA FILE=REGISTRY SSS FUL L1 OR L2 OR L3
L5 STR



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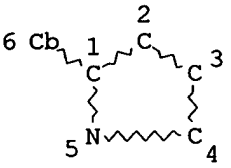
CONNECT IS X2 RC AT 6
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
L6 STR



NODE ATTRIBUTES:
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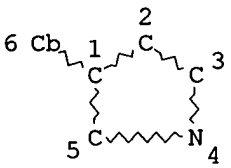
CONNECT IS X2 RC AT 6
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
L7 STR



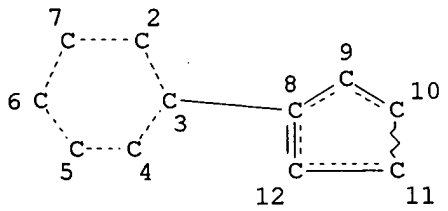
NODE ATTRIBUTES:
CONNECT IS X2 RC AT 6
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
L8 51889 SEA FILE=REGISTRY SUB=L4 SSS FUL (L7 OR L6 OR L5)

100.0% PROCESSED 82088 ITERATIONS 51889 ANSWERS
SEARCH TIME: 00.00.02

L9 STR

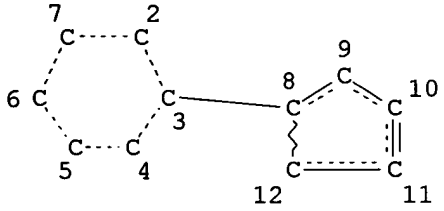


Searcher : Shears 571-272-2528

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

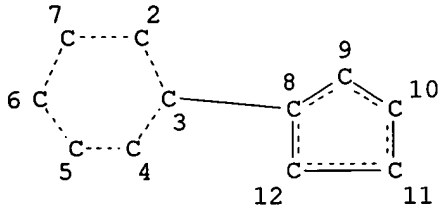
STEREO ATTRIBUTES: NONE
L10 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L11 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L12 27032 SEA FILE=REGISTRY SSS FUL L9 OR L10 OR L11

100.0% PROCESSED 1178898 ITERATIONS 27032 ANSWERS
SEARCH TIME: 00.00.17

FILE 'CAPLUS' ENTERED AT 12:16:03 ON 13 JAN 2006

FILE COVERS 1907 - 13 Jan 2006 VOL 144 ISS 4
FILE LAST UPDATED: 12 Jan 2006 (20060112/ED)

L13 18908 S L8 OR L12
L14 11 S L13 AND (EDG OR EDG1)

E23 THROUGH E63 ASSIGNED

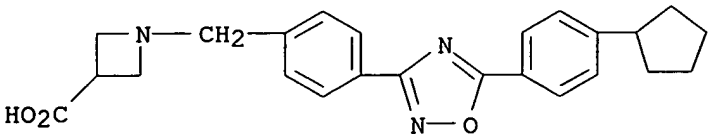
L14 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:986123 CAPLUS
DOCUMENT NUMBER: 143:431986
TITLE: Discovery of Potent 3,5-Diphenyl-1,2,4-oxadiazole Sphingosine-1-phosphate-1 (S1P1) Receptor Agonists with Exceptional Selectivity against S1P2 and S1P3
AUTHOR(S): Li, Zhen; Chen, Weirong; Hale, Jeffrey J.; Lynch, Christopher L.; Mills, Sander G.; Hajdu, Richard; Keohane, Carol Ann; Rosenbach, Mark J.; Milligan, James A.; Shei, Gan-Ju; Chrebet, Gary; Parent, Stephen A.; Bergstrom, James; Card, Deborah; Forrest, Michael; Quackenbush, Elizabeth J.; Wickham, L. Alexandra; Vargas, Hugo; Evans, Rose M.; Rosen, Hugh; Mandala, Suzanne
CORPORATE SOURCE: Departments of Medicinal Chemistry and Immunology Rheumatology Research, Merck Research Laboratories, Rahway, NJ, 07065, USA
SOURCE: Journal of Medicinal Chemistry (2005), 48(20), 6169-6173
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A class of 3,5-diphenyl-1,2,4-oxadiazole based compds. have been identified as potent sphingosine-1-phosphate-1 (S1P1) receptor agonists with minimal affinity for the S1P2 and S1P3 receptor subtypes. Analog 26 (S1P1 IC50 = 0.6 nM) has an excellent pharmacokinetics profile in the rat and dog and is efficacious in a rat skin transplant model, indicating that S1P3 receptor agonism is not a component of immunosuppressive efficacy.
IT **635701-68-7P 868618-67-1P 868618-68-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Discovery of Potent 3,5-Diphenyl-1,2,4-oxadiazole Sphingosine-1-phosphate-1 (S1P1) Receptor Agonists with Exceptional

Selectivity)

RN 635701-68-7 CAPLUS

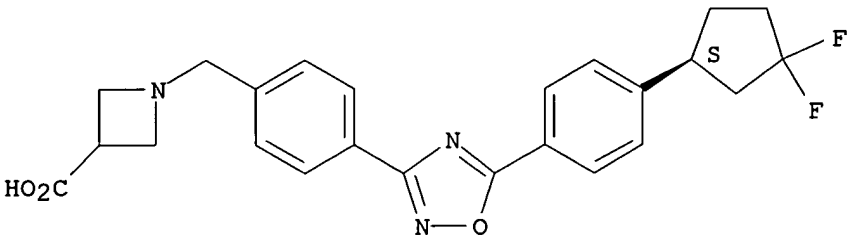
CN 3-Azetidinecarboxylic acid, 1-[[4-[5-(4-cyclopentylphenyl)-1,2,4-oxadiazol-3-yl]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 868618-67-1 CAPLUS

CN 3-Azetidinecarboxylic acid, 1-[[4-[5-[4-[(1S)-3,3-difluorocyclopentyl]phenyl]-1,2,4-oxadiazol-3-yl]phenyl]methyl]- (9CI) (CA INDEX NAME)

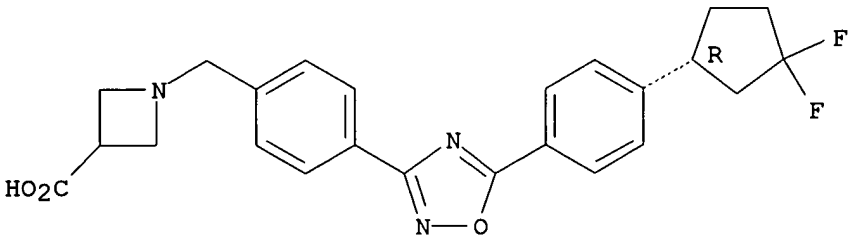
Absolute stereochemistry.



RN 868618-68-2 CAPLUS

CN 3-Azetidinecarboxylic acid, 1-[[4-[5-[4-[(1R)-3,3-difluorocyclopentyl]phenyl]-1,2,4-oxadiazol-3-yl]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **868618-56-8P**

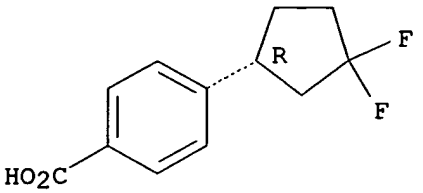
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(Discovery of Potent 3,5-Diphenyl-1,2,4-oxadiazole Sphingosine-1-phosphate-1 (S1P1) Receptor Agonists with Exceptional Selectivity)

RN 868618-56-8 CAPLUS

CN Benzoic acid, 4-[(1R)-3,3-difluorocyclopentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

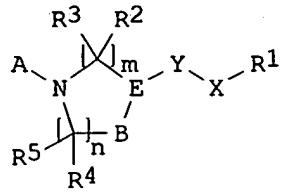
L14 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:983995 CAPLUS
DOCUMENT NUMBER: 143:286450
TITLE: Preparation of 3-piperidino(or piperazino)propionic acid derivatives as immunosuppressants
INVENTOR(S): Lu, Wenshou; Pan, Shifeng; Marsilje, Thomas H.; Gao, Wenqi; Gray, Nathanael Schiander; He, Yun; Liu, Yahua; Mi, Yuan; Xie, Yongping
PATENT ASSIGNEE(S): IRM LLC, Bermuda
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005082089	A2	20050909	WO 2005-US6311	20050224

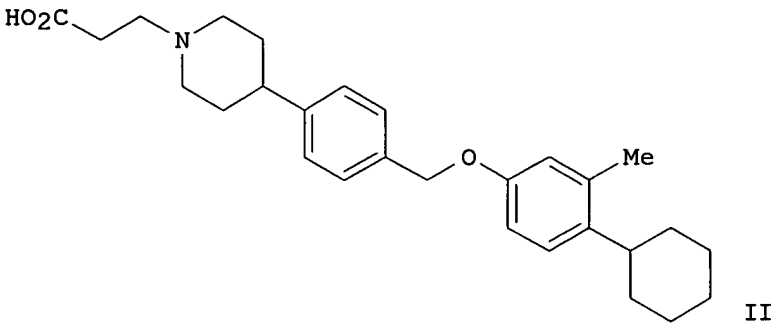
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-547757P P 20040224

OTHER SOURCE(S): MARPAT 143:286450
GI



I



II

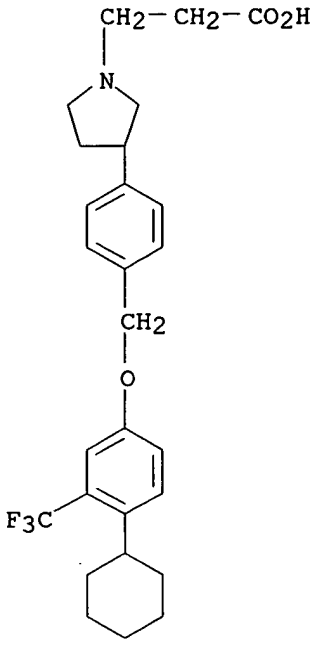
AB The title compds. [I; n = 0-2; m = 1-3; R1 = (un)substituted (hetero)aryl; R2-R5 = H, halo, OH, etc.; A = X1C(O)OR7, X1OP(O)(OR7)2, X1P(O)(OR7)2, etc. (wherein X1 = a bond, alkylene, alkenylene; R7 = H, alkyl); B = CR8R9 (R8, R9 = H, OH, alkyl, etc.); E = CR8 or N (R8 = H, OH, alkyl, etc.) or B = CR9 and E = C and B and E are connected via a double bond; X = a bond, X1OX2, X1NR7X2, etc. (X1, X2 = a bond, alkylene, alkenylene; R7 = H, alkyl); Y = (un)substituted (hetero)aryl], immunosuppressants useful in the treatment or prevention of diseases or disorders mediated by lymphocyte interactions, particularly diseases associated with **EDG** receptor mediated signal transduction, were prepared E.g., a multi-step synthesis of II, starting from 4-bromo-3-methylphenol, was given. The compds. I showed selectivity for the S1P1 (**EDG**-1) receptor. For example, II showed EC50 of 0.22 nM and is at least 1000 fold selective for S1P-1 compared to one or more of the other receptors including S1P-3, S1P-6 and S1P-8. The present invention also relates to process for production of compds. I, their uses and pharmaceutical compns. containing them.

IT **864358-77-0P 864358-79-2P 864358-84-9P 864358-90-7P 864359-00-2P 864359-01-3P 864359-02-4P 864359-03-5P 864359-05-7P 864359-06-8P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 3-piperidino(or piperazino)propionic acid derivs. as immunosuppressants)

RN 864358-77-0 CAPLUS

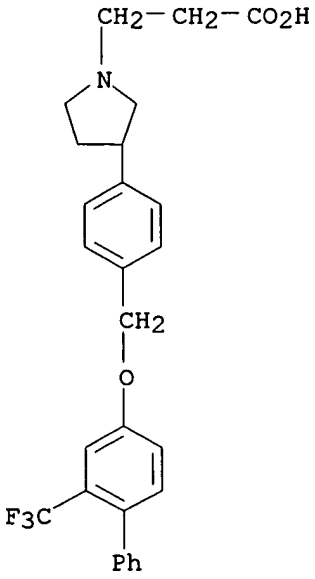
CN 1-Pyrrolidinepropanoic acid, 3-[4-[[4-cyclohexyl-3-(trifluoromethyl)phenoxy]methyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

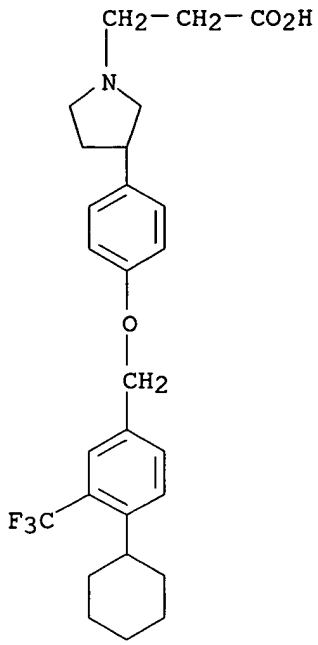
RN 864358-79-2 CAPLUS
CN 1-Pyrrolidinepropanoic acid, 3-[4-[[[2-(trifluoromethyl)[1,1'-biphenyl]-4-yl]oxy]methyl]phenyl]- (9CI) (CA INDEX NAME)



RN 864358-84-9 CAPLUS

CN 1-Pyrrolidinepropanoic acid, 3-[4-[[4-cyclohexyl-3-(trifluoromethyl)phenyl]methoxy]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

RN 864358-90-7 CAPLUS
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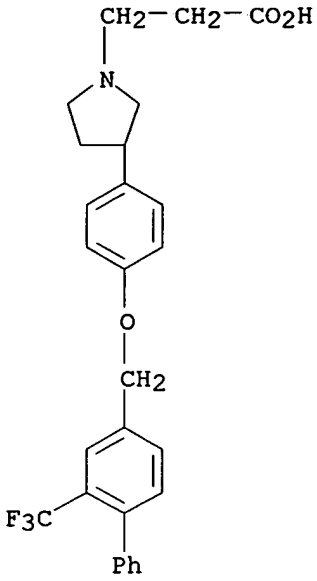
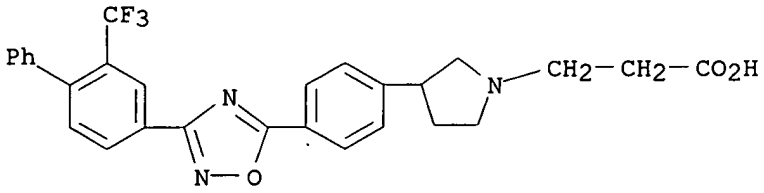
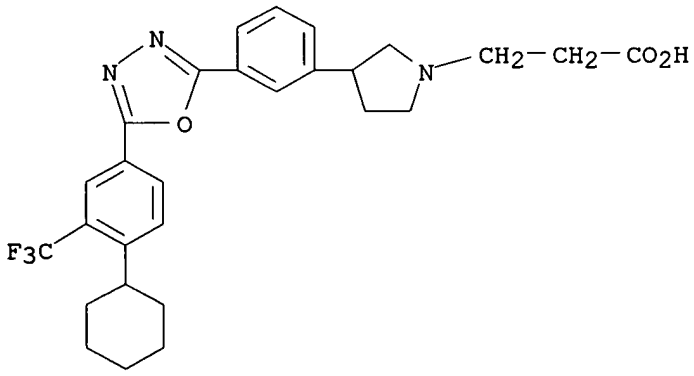


RN 864359-00-2 CAPLUS
CN 1-Pyrrolidinepropanoic acid, 3-[4-[3-[2-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1,2,4-oxadiazol-5-yl]phenyl]- (9CI) (CA INDEX NAME)

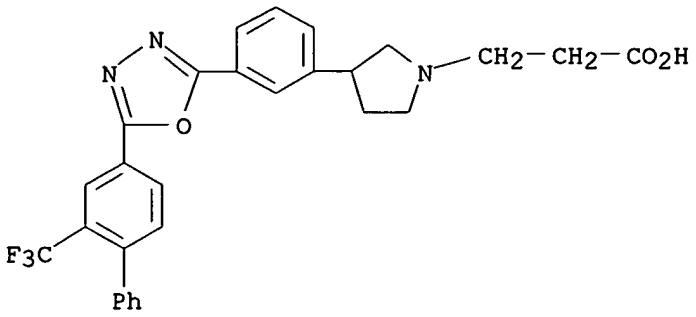


RN 864359-01-3 CAPLUS
CN 1-Pyrrolidinepropanoic acid, 3-[3-[5-[4-cyclohexyl-3-(trifluoromethyl)phenyl]-1,3,4-oxadiazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)

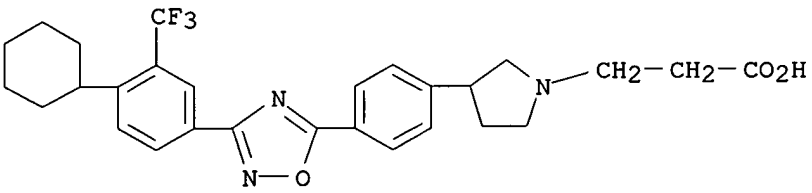


RN 864359-02-4 CAPLUS

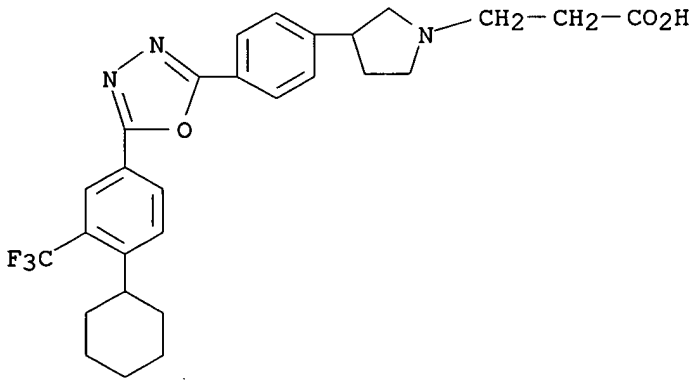
CN 1-Pyrrolidinepropanoic acid, 3-[3-[5-[2-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1,3,4-oxadiazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



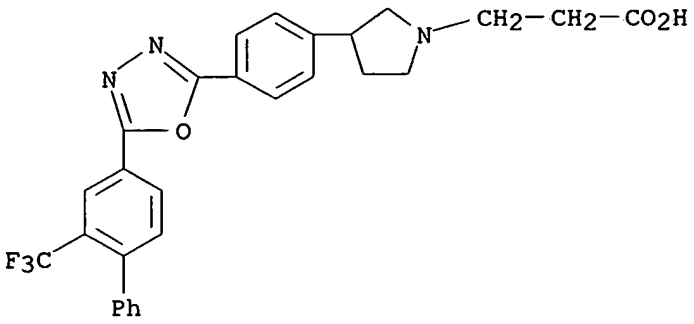
RN 864359-03-5 CAPLUS
CN 1-Pyrrolidinepropanoic acid, 3-[4-[3-[4-cyclohexyl-3-(trifluoromethyl)phenyl]-1,2,4-oxadiazol-5-yl]phenyl]- (9CI) (CA INDEX NAME)



RN 864359-05-7 CAPLUS
CN 1-Pyrrolidinepropanoic acid, 3-[4-[5-[4-cyclohexyl-3-(trifluoromethyl)phenyl]-1,3,4-oxadiazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



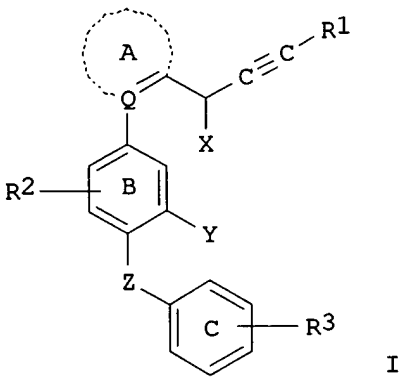
RN 864359-06-8 CAPLUS
CN 1-Pyrrolidinepropanoic acid, 3-[4-[5-[2-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1,3,4-oxadiazol-2-yl]phenyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:72766 CAPLUS
DOCUMENT NUMBER: 142:176543
TITLE: Preparation of arylalkyne derivatives having **EDG** receptor antagonist effect
INVENTOR(S): Sato, Susumu; Nakamura, Takeshi; Nara, Futoshi; Komesu, Kiyoaki
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 181 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005022986	A2	20050127	JP 2003-187530	20030630
PRIORITY APPLN. INFO.:			JP 2003-187530	20030630

OTHER SOURCE(S): MARPAT 142:176543
GI



I

AB The title compds. (I), or salts or esters thereof [R1 = (un)substituted C1-17 alkyl optionally containing 1 or ≥2 of a double or triple bond, (un)substituted benzene ring, O, S, SO, SO2, and (un)substituted NH; R2 represents 1-3 substituents selected from

H, HO, CO2H, NO2, halo, alkoxy, alkenyloxy, alkynyloxy, aralkyloxy, NH2, alkylamino, alkanoylamino, alkylthio, and (un)substituted C1-6 alkyl; R3 represents 1-3 substituents selected from H, HO, aralkyloxy, alkylamino, alkanoylamino, alkylthio, CO2H, NO2, halo, and (un)substituted C1-10 alkyl; X = alkylamino, HO, NH2, (un)substituted C1-6 alkoxy; Y = CO2H, SO3H, P(O)(OH)2; Z = O, S, (un)substituted NH, CO, SO, SO2, (un)substituted CH2; ring A = (un)substituted 4- to 7-membered ring containing -Q:C- as a partial structure and optionally containing 1 or ≥2 of CH:CH, N, O, (un)substituted NH, S, and CO; Q = C, N] are prepared These compds. are endothelial differentiation gene 1 (**EDG**-1) receptor antagonists and effective in preventing and/or treating inflammations, diseases associated with abnormal angiogenesis, cerebral vascular spasm, brain ischemia, cancer-related diseases, cerebral infarction, myocardial infarction, nephritis, pneumonia, immune diseases, Crohn's disease, colitis, or chronic diarrhea. Thus, Suzuki coupling of Me 5-bromo-2-[(4-butoxyphenyl)thio]benzoate with 2-formylphenylboronic acid in the presence of tetrakis(triphenylphosphine)palladium in a mixture of 4.6 M aqueous K2CO3 solution in 1,2-dimethoxyethane at 60° for 5 h to give 99% Me 4-[(4-butoxyphenyl)thio]-2'-formyl-1,1'-biphenyl-3-carboxylate (II). 2-[[7-(2-Propynyloxy)heptyl]oxy]tetrahydro-2H-pyran was treated with 1.6 M BuLi/hexane in THF at -78°, stirred for 10 min, treated dropwise with a solution of II in THF, and stirred for 1 h to give 78% Me 4-[(4-butoxyphenyl)thio]-2'-[1-hydroxy-4-[[7-[(tetrahydro-2H-pyran-2-yl)oxy]heptyl]oxy]-2-butynyl]-1,1'-biphenyl-3-carboxylate which was stirred in the presence of pyridinium p-toluenesulfonate in ethanol at 60° for 1 h to give 82% Me 4-[(4-butoxyphenyl)thio]-2'-[1-hydroxy-4-[(7-hydroxyheptyl)oxy]-2-butynyl]-1,1'-biphenyl-3-carboxylate (III). III was heated with NaOH in aqueous dioxane at 90° for 8 h to give 76% sodium 4-[(4-butoxyphenyl)thio]-2'-[1-hydroxy-4-[(7-hydroxyheptyl)oxy]-2-butynyl]-1,1'-biphenyl-3-carboxylate (IV). IV inhibited the sphingosine-1-phosphate-stimulated production of cAMP in CHO cells expressing **Edg**-1 with IC50 of 0.020 μM.

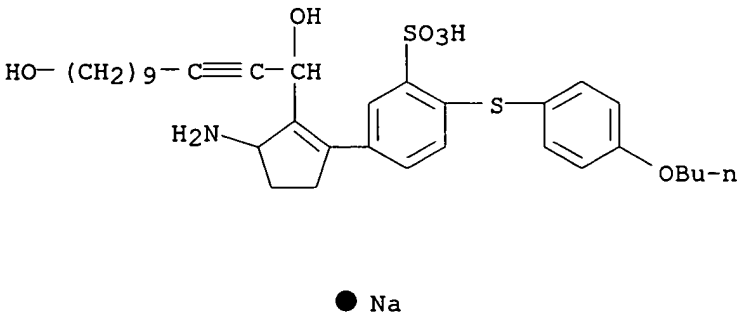
IT **832725-57-2P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of alkyne derivs. as **EDG**-1 receptor antagonists)

RN 832725-57-2 CAPLUS

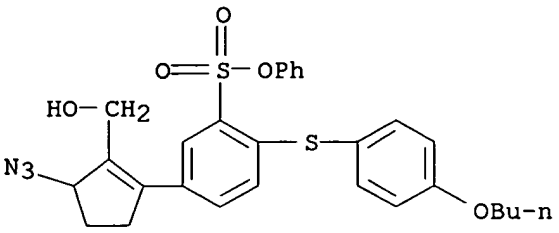
CN Benzenesulfonic acid, 5-[3-amino-2-(1,12-dihydroxy-2-dodecynyl)-1-cyclopenten-1-yl]-2-[(4-butoxyphenyl)thio]-, monosodium salt (9CI) (CA INDEX NAME)



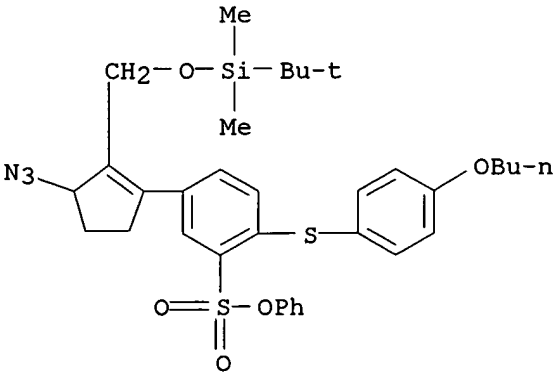
IT **832726-92-8P 832726-93-9P 832726-94-0P**

832726-95-1P 832726-96-2P 832726-97-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of alkyne derivs. as **EDG**-1 receptor antagonists)

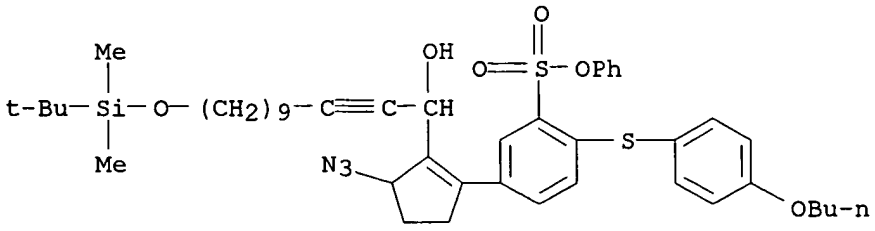
RN 832726-92-8 CAPLUS
CN Benzenesulfonic acid, 5-[3-azido-2-(hydroxymethyl)-1-cyclopenten-1-yl]-2-[(4-butoxyphenyl)thio]-, phenyl ester (9CI) (CA INDEX NAME)



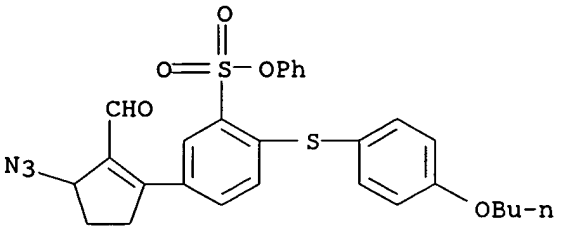
RN 832726-93-9 CAPLUS
CN Benzenesulfonic acid, 5-[3-azido-2-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1-cyclopenten-1-yl]-2-[(4-butoxyphenyl)thio]-, phenyl ester (9CI) (CA INDEX NAME)



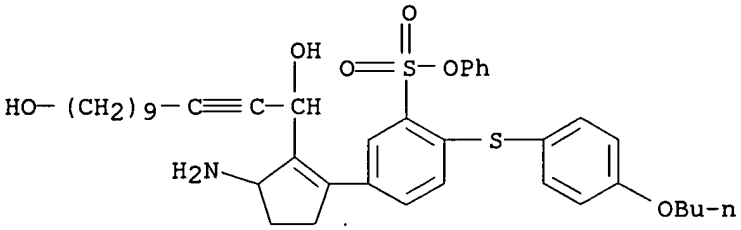
RN 832726-94-0 CAPLUS
CN Benzenesulfonic acid, 5-[3-azido-2-[12-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-hydroxy-2-dodecynyl]-1-cyclopenten-1-yl]-2-[(4-butoxyphenyl)thio]-, phenyl ester (9CI) (CA INDEX NAME)



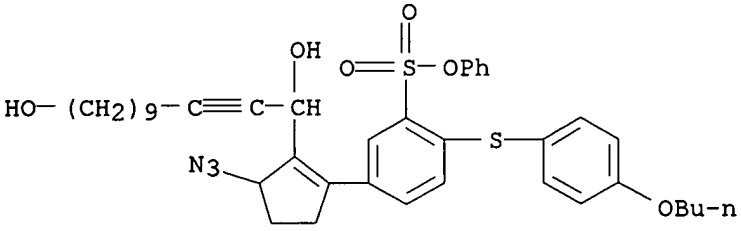
RN 832726-95-1 CAPLUS
CN Benzenesulfonic acid, 5-(3-azido-2-formyl-1-cyclopenten-1-yl)-2-[(4-butoxyphenyl)thio]-, phenyl ester (9CI) (CA INDEX NAME)



RN 832726-96-2 CAPLUS
CN Benzenesulfonic acid, 5-[3-amino-2-(1,12-dihydroxy-2-dodecynyl)-1-cyclopenten-1-yl]-2-[(4-butoxyphenyl)thio]-, phenyl ester (9CI) (CA INDEX NAME)



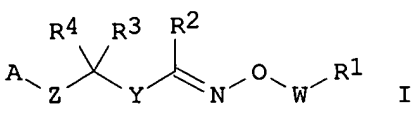
RN 832726-97-3 CAPLUS
CN Benzenesulfonic acid, 5-[3-azido-2-(1,12-dihydroxy-2-dodecynyl)-1-cyclopenten-1-yl]-2-[(4-butoxyphenyl)thio]-, phenyl ester (9CI) (CA INDEX NAME)



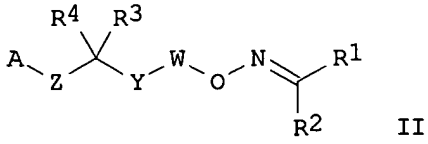
L14 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:1036855 CAPLUS
DOCUMENT NUMBER: 142:23084
TITLE: Preparation of benzylaminopropionic acid derivatives as immunosuppressants
INVENTOR(S): Pan, Shifeng; Gao, Wenqi; Gray, Nathanael S.; Mi, Yuan; Fan, Yi
PATENT ASSIGNEE(S): IRM LLC, Bermuda
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004103306	A2	20041202	WO 2004-US15603		20040519
WO 2004103306	A3	20050303			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
US 2005014728	A1	20050120	US 2004-849323		20040519
PRIORITY APPLN. INFO.:			US 2003-471931P	P	20030519
			US 2004-561968P	P	20040414

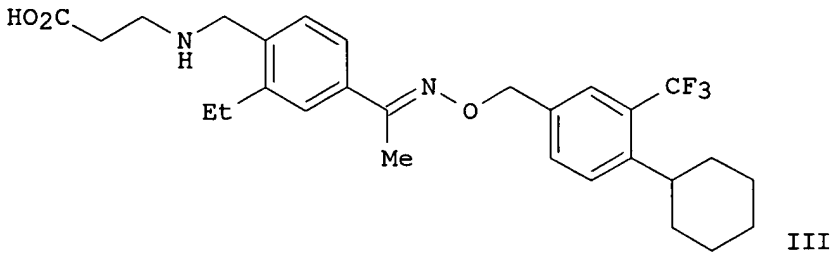
OTHER SOURCE(S): MARPAT 142:23084
GI



I



II



III

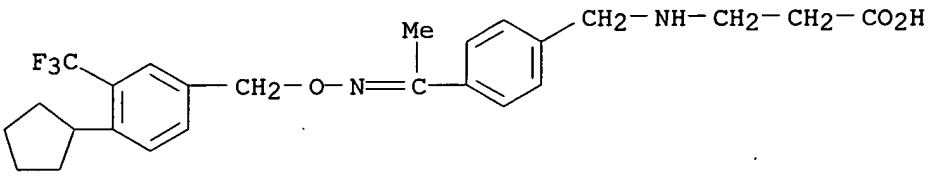
AB Title compds. represented by the formula I & II [wherein A = CO2R5, OPO(OR5)2, PO(OR5)2, S(O2)OR5, P(O)(R5)OR5, 1H-tetrazol-5-yl; W = a bond, alkylene, alkenylene; Y = (un)substituted (hetero)aryl; Z = aminoalkyl, pyrrolidinyl, piperidinyl, etc.; R1 = (un)substituted (hetero)aryl; R2 = H, (halo)alkyl, alkenyl, alkynyl; R3, R4 = independently H, halo, alkyl, OH, etc.; R5 = H or alkyl; and pharmaceutically acceptable salts, hydrates, isomers, solvates and prodrugs thereof] were prepared as immunosuppressants. For example, II was given in a multi-step synthesis starting from 4-amino-3-ethylbenzonitrile. II showed binding affinity for the **EDG**-1 receptor with EC50 values of 0.8 nM and at least 1000 fold selectivity for **EDG**-1/**EDG**-3, **EDG**-5, **EDG**-6
and **EDG**-8, and with ED50 values of 0.07 mg/kg in screening

assay for measurement of blood lymphocyte depletion. Thus, I and their pharmaceutical compns. are useful as immunosuppressants for the treatment or prevention of diseases or disorders mediated by lymphocyte interactions, particularly diseases associated with **EDG** receptor mediated signal transduction.

IT **800380-18-1P**, 3-[[4-[1-[[(4-Cyclopentyl-3-trifluoromethylbenzyl)oxy]imino]ethyl]benzyl]amino]propionic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzylaminopropionic acid derivs. as immunosuppressants)

RN 800380-18-1 CAPLUS

CN β-Alanine, N-[[4-[1-[[[4-cyclopentyl-3-(trifluoromethyl)phenyl]methoxy]imino]ethyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	2004:1033553 CAPLUS
DOCUMENT NUMBER:	142:38256
TITLE:	Preparation of 3-(2-amino-1-azacyclyl)-5-aryl-1,2,4-oxadiazoles as S1P receptor agonists
INVENTOR(S):	Colandrea, Vincent J.; Doherty, George A.; Hale, Jeffrey J.; Lynch, Christopher; Mills, Sander G.; Neway, William Edward, III; Toth, Leslie
PATENT ASSIGNEE(S):	Merck & Co., Inc., USA
SOURCE:	PCT Int. Appl., 135 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

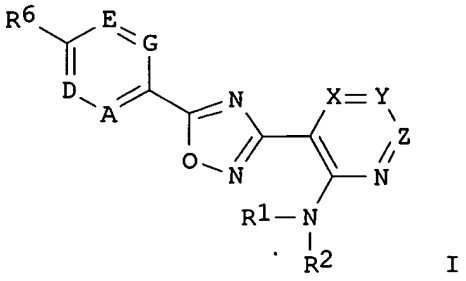
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004103279	A2	20041202	WO 2004-US14837	20040512
WO 2004103279	A3	20050519		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-470659P P 20030515

OTHER SOURCE(S): MARPAT 142:38256
GI



I

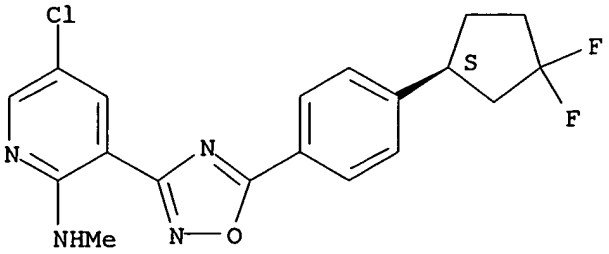
AB The present invention encompasses compds. of formula (I) [A = CR3 or N; D = CR4 or N; E = CR6 or N; G = CR7 or N, with the proviso that at least one of A, D, E and G is not N; X, Y, Z = N or CR8, with the proviso that at least one of X, Y and Z is not N; R1, R2 = H, C1-6 alkyl, optionally substituted with 1 to 3 halo groups; or NR1R2 together forms a 3- to 6-membered saturated monocyclic ring; R3, R4, R6, R7 = H, halo, cyano, C1-4 alkyl or C1-4 alkoxy, each optionally substituted with 1 to 3 halo groups; R5 = halo, each optionally substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-6 cycloalkyl, C1-6 alkoxy, C3-6 cycloalkoxy, C1-6 acyl, or aryl, heterocyclyl; or R4 and R5 may be joined together with the atoms to which they are attached to form a (un)substituted 5 or 6-membered monocyclic ring, optionally containing 1 to 3 heteroatoms selected from O, S and (un)substituted NH] as well as the pharmaceutically acceptable salts thereof. These compds. are useful for treating immune mediated diseases and conditions (imminoregulatory abnormality), such as autoimmune or chronic inflammatory disease, bone marrow, organ and tissue transplant rejection, graft-vs.-host disease, or respiratory disease or condition. They have utility as immunoregulatory agents as demonstrated by their activity as potent and selective agonists of the S1P1/**Edg1** receptor over the S1PR3/Edg3 receptor with a selectivity for the S1P1/**Edg1** receptor over the S1PR3/Edg3 receptor of more than 100 fold. They possessed an EC50 for binding to the S1P1/**Edg1** receptor of less than 50 nM as evaluated by the [35S]GTPγS binding assay. Thus, 4-(2-methylpropyl)benzoic acid was treated with 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride and 1-hydroxybenzotriazole in DMF at room for 10 min and condensed with 2-chloro-N-hydroxynicotinamidine at 120° for 3 h to give 3-[2-(Chloro)pyridin-3-yl]-5-[4-(2-methylpropyl)phenyl]-1,2,4-oxadiazole (II). II was stirred with methylamine in DMF at 120° for 16 h to give 3-[2-(methylamino)pyridin-3-yl]-5-[4-(2-methylpropyl)phenyl]-1,2,4-oxadiazole.

IT **801302-22-7P 801302-25-0P 801302-43-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (aminoazacyclyl)aryloxadiazoles as S1P receptor agonists for treating immune mediated diseases and conditions)

RN 801302-22-7 CAPLUS

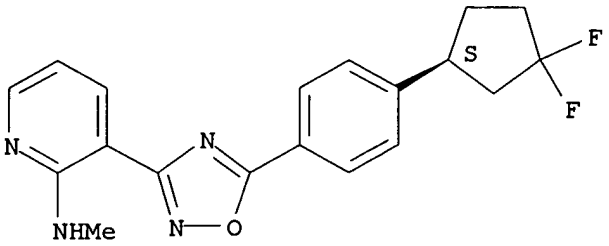
CN 2-Pyridinamine, 5-chloro-3-[5-[4-[(1S)-3,3-difluorocyclopentyl]phenyl]-1,2,4-oxadiazol-3-yl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

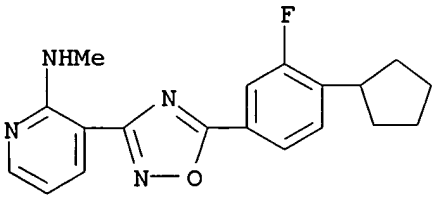


RN 801302-25-0 CAPLUS
CN 2-Pyridinamine, 3-[5-[4-[(1S)-3,3-difluorocyclopentyl]phenyl]-1,2,4-oxadiazol-3-yl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

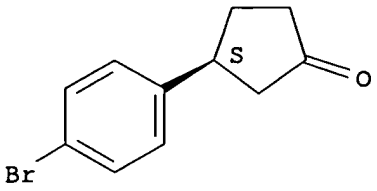


RN 801302-43-2 CAPLUS
CN 2-Pyridinamine, 3-[5-(4-cyclopentyl-3-fluorophenyl)-1,2,4-oxadiazol-3-yl]-N-methyl- (9CI) (CA INDEX NAME)

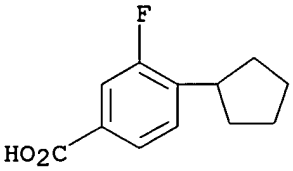


IT **160678-59-1P,** (S)-3-(4-Bromophenyl)cyclopentanone
801303-24-2P 801303-51-5P 801303-52-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (aminoazacyclyl)aryloxadiazoles as S1P receptor agonists for treating immune mediated diseases and conditions)
RN 160678-59-1 CAPLUS
CN Cyclopentanone, 3-(4-bromophenyl)-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

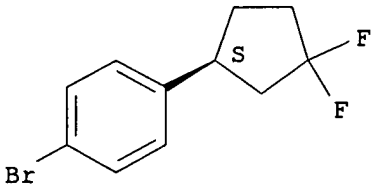


RN 801303-24-2 CAPLUS
CN Benzoic acid, 4-cyclopentyl-3-fluoro- (9CI) (CA INDEX NAME)



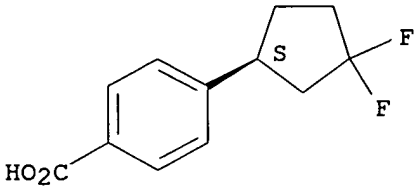
RN 801303-51-5 CAPLUS
CN Benzene, 1-bromo-4-[(1S)-3,3-difluorocyclopentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 801303-52-6 CAPLUS
CN Benzoic acid, 4-[(1S)-3,3-difluorocyclopentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L14 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:740295 CAPLUS
DOCUMENT NUMBER: 141:260551
TITLE: Preparation of substituted (hetero)aryl derivatives as modulators of glucose metabolism
INVENTOR(S): Jones, Robert M.; Semple, Graeme; Choi, Jin Sun Karoline; Xiong, Yifeng; Fioravanti, Beatriz

PATENT ASSIGNEE(S): Arena Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004076413	A2	20040910	WO 2004-US5555	20040223
WO 2004076413	A3	20041202		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2515963	AA	20040910	CA 2004-2515963	20040223
EP 1606282	A2	20051221	EP 2004-713803	20040223
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PRIORITY APPLN. INFO.: US 2003-449788P P 20030224
WO 2004-US5555 W 20040223

OTHER SOURCE(S): MARPAT 141:260551
GI

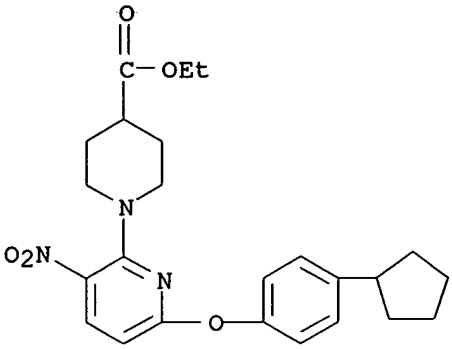
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [A, B = alkylene; U = N, alkyl; D = O, SO0-2, alkyl, amino; V = alkylene, ethynylene, etc.; W = sulfonamido, amino, O, SO0-2, etc.; X, Y = alkyl, N; Z = H, acyl, acyloxy, etc.] are prepared For instance, 6'-chloro-3'-nitro-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-4-carboxylic acid Et ester is reacted with 4-(2-(Methoxycarbonyl)acetyl)phenol (DMF, K2CO3, overnight) to give corresponding phenoxy example compound II. I are RUP3 receptor agonists and are useful in prophylaxis or treatment of metabolic disorders and complications thereof, such as, diabetes and obesity.

IT **753498-72-5P**, 6'-[4-(Cyclopentyl)phenoxy]-3'-nitro-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-4-carboxylic acid ethyl ester
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted (hetero)aryl derivs. as modulators of glucose metabolism)

RN 753498-72-5 CAPLUS

CN 4-Piperidinecarboxylic acid, 1-[6-(4-cyclopentylphenoxy)-3-nitro-2-pyridinyl]-, ethyl ester (9CI) (CA INDEX NAME)



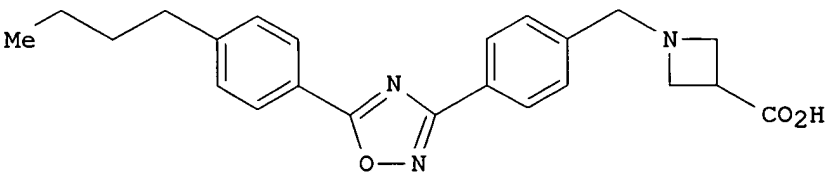
L14 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:354910 CAPLUS
DOCUMENT NUMBER: 140:357191
TITLE: Process for making azetidine-3-carboxylic acid
INVENTOR(S): Miller, Ross; Lang, Fengrui; Song, Zhiguo Jake; Zewge, Daniel
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004035538	A1	20040429	WO 2003-US32074	20031010

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-418565P P 20021015

OTHER SOURCE(S): CASREACT 140:357191; MARPAT 140:357191
GI



I

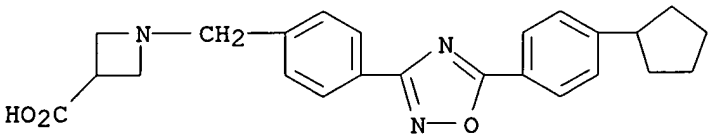
Searcher : Shears 571-272-2528

AB The present invention is an improved process for synthesizing azetidine-3-carboxylic acid. The process comprises: 1. converting di-Et α,α-bis(hydroxymethyl)malonate to the corresponding bis(triflate); ii. azetidine ring-formation by intramol. cyclization using benzylamine; iii. saponification/decarboxylation to give the mono acid azetidine, and iv. hydrogenation to give the title compound The current process is amenable to larger-scale preparation and uses less toxic starting materials than prior art methods. Azetidine-3-carboxylic acid is used to reductively alkylate substituted benzaldehydes to make S1P1/**Edg1** receptor agonists, which are immunosupressive agents. Thirty example S1P1/**Edg1** agonists, e.g. I, are prepared

IT **635701-68-7P**, 1-[4-[5-[4-(Cyclopentyl)phenyl]-1,2,4-oxadiazol-3-yl]benzyl]azetidine-3-carboxylic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(process for making azetidine-3-carboxylic acid and aldehyde alkylation thereof to make SP11/**Edg1** agonists)

RN 635701-68-7 CAPLUS

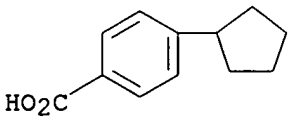
CN 3-Azetidinecarboxylic acid, 1-[[4-[5-(4-cyclopentylphenyl)-1,2,4-oxadiazol-3-yl]phenyl]methyl]- (9CI) (CA INDEX NAME)



IT **19936-22-2**, 4-Cyclopentylbenzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(process for making azetidine-3-carboxylic acid and aldehyde alkylation thereof to make SP11/**Edg1** agonists)

RN 19936-22-2 CAPLUS

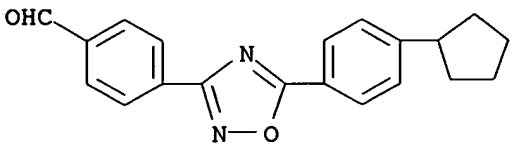
CN Benzoic acid, 4-cyclopentyl- (9CI) (CA INDEX NAME)



IT **635701-96-1P**, 4-[5-(4-Cyclopentylphenyl)-1,2,4-oxadiazol-3-yl]benzaldehyde
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for making azetidine-3-carboxylic acid and aldehyde alkylation thereof to make SP11/**Edg1** agonists)

RN 635701-96-1 CAPLUS

CN Benzaldehyde, 4-[5-(4-cyclopentylphenyl)-1,2,4-oxadiazol-3-yl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:80878 CAPLUS
DOCUMENT NUMBER: 140:139547
TITLE: Screening for substituted aryl isoxazole effectors of the **Edg**-1 receptor for the treatment of receptor-associated conditions
INVENTOR(S): Solow-Cordero, David; Shankar, Geetha; Gluchowski, Charles; Spencer, Juliet V.
PATENT ASSIGNEE(S): Ceretek Llc, USA
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009816	A1	20040129	WO 2003-US22463	20030717
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2466288	AA	20040129	CA 2003-2466288	20030717
US 2004147562	A1	20040729	US 2003-621966	20030717
EP 1523556	A1	20050420	EP 2003-765716	20030717
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005533852	T2	20051110	JP 2004-523557	20030717
PRIORITY APPLN. INFO.:			US 2002-397299P P	20020718
			WO 2003-US22463 W	20030717

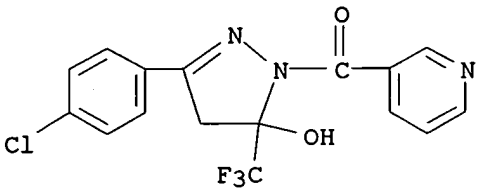
OTHER SOURCE(S): MARPAT 140:139547
AB In one aspect, the present invention provides a method of modulating an **Edg**-1 receptor mediated biol. activity in a cell. A cell expressing the **Edg**-1 receptor is contacted with a modulator of the **Edg**-1 receptor sufficient to modulate the **Edg**-1 receptor mediated biol. activity. In another aspect, the present

invention provides a method for modulating an **Edg**-1 receptor mediated biol. activity in a subject. A therapeutically effective amount of a modulator of the **Edg**-1 receptor is administered to the subject.

IT **372091-61-7P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and therapeutic use as **Edg**-1 inhibitor; screening for substituted aryl isoxazole effectors of **Edg**-1 receptor for treatment of receptor-associated conditions)

RN 372091-61-7 CAPLUS

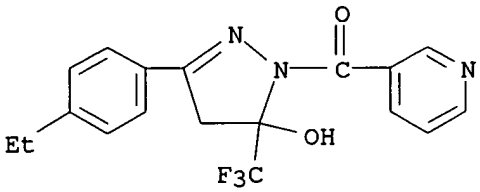
CN 1H-Pyrazol-5-ol, 3-(4-chlorophenyl)-4,5-dihydro-1-(3-pyridinylcarbonyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT **352342-35-9P 357444-31-6P 372175-50-3P**
374918-60-2P 376616-68-1P 376621-55-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reactions of; screening for substituted aryl isoxazole effectors of **Edg**-1 receptor for treatment of receptor-associated conditions)

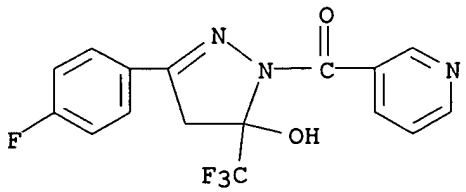
RN 352342-35-9 CAPLUS

CN 1H-Pyrazol-5-ol, 3-(4-ethylphenyl)-4,5-dihydro-1-(3-pyridinylcarbonyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

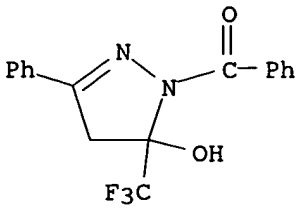


RN 357444-31-6 CAPLUS

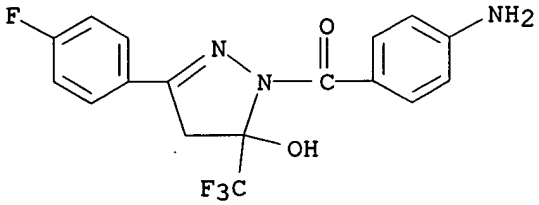
CN 1H-Pyrazol-5-ol, 3-(4-fluorophenyl)-4,5-dihydro-1-(3-pyridinylcarbonyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



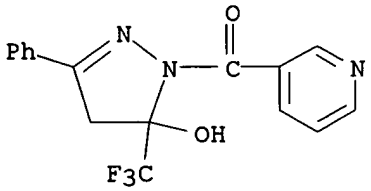
RN 372175-50-3 CAPLUS
CN 1H-Pyrazol-5-ol, 1-benzoyl-4,5-dihydro-3-phenyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



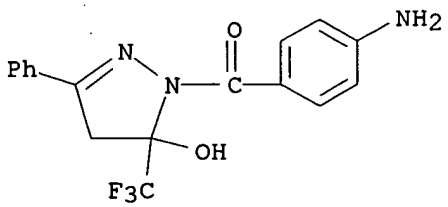
RN 374918-60-2 CAPLUS
CN 1H-Pyrazol-5-ol, 1-(4-aminobenzoyl)-3-(4-fluorophenyl)-4,5-dihydro-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 376616-68-1 CAPLUS
CN 1H-Pyrazol-5-ol, 4,5-dihydro-3-phenyl-1-(3-pyridinylcarbonyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 376621-55-5 CAPLUS
CN 1H-Pyrazol-5-ol, 1-(4-aminobenzoyl)-4,5-dihydro-3-phenyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:1006710 CAPLUS
DOCUMENT NUMBER: 140:42183
TITLE: Preparation of 1-((5-aryl-1,2,4-oxadiazol-3-yl)benzyl)azetidine-3-carboxylates and -pyrrolidine-3-carboxylates as **EDG** receptor agonists
INVENTOR(S): Chen, Weirong; Hale, Jeffrey J.; Li, Zhen; Lynch, Christopher L.; Mills, Sander G.; Neway, William E., III
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003105771	A2	20031224	WO 2003-US18852	20030616
WO 2003105771	A3	20040708		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2488117	AA	20031224	CA 2003-2488117	20030616
EP 1549640	A2	20050706	EP 2003-741995	20030616
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005533058	T2	20051104	JP 2004-512679	20030616
US 2005245575	A1	20051103	US 2004-515192	20041119
PRIORITY APPLN. INFO.:			US 2002-389173P P	20020617
			WO 2003-US18852 W	20030616

OTHER SOURCE(S): MARPAT 140:42183
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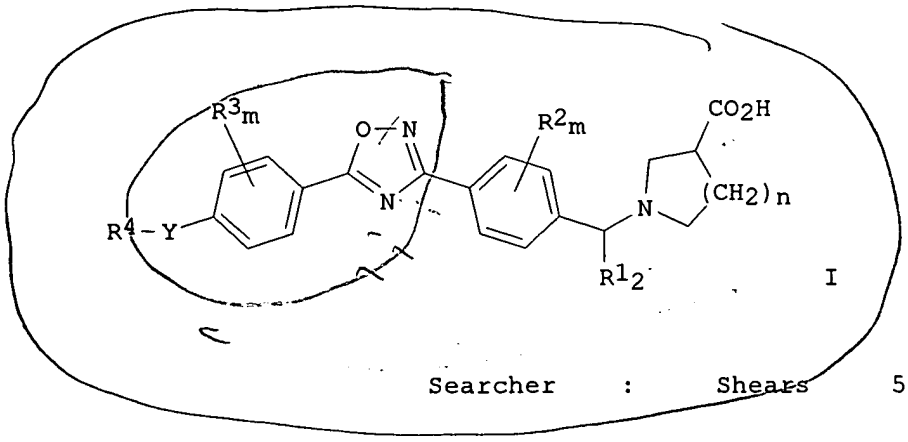


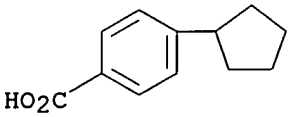
Searcher : Shears 571-272-2528

AB Title compds. I [n = 0, 1; Y = bond, O, S, S(O), SO2; R1 = H, (un)substituted alkyl; R2 = halo, OH, (un)substituted alkyl, alkoxy; R3 = halo, CN, OH, (un)substituted NH2, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, cycloalkyl, Ph, heterocyclic; R4 = H, halo, CN, (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, Ph, heterocyclic; m = 0-4] were prepared for use as **EDG** receptor agonists in treating immune mediated diseases and conditions, such as bone marrow, organ and tissue transplant rejection (no data). Thus, 4-HOCH2C6H4CN was converted to 4-HOCH2C6H4C(:NH)NHOH which was cyclized with 4-Me2CHCH2C6H4CO2H to give 5-[4-(2-methylpropyl)phenyl]-3-(4-hydroxymethylphenyl)-1,2,4-oxadiazole which was oxidized to the aldehyde and reductively alkylated with azetidine-3-carboxylic acid to give I [Y = bond, n = 1, m = 0, R4 = CH2CHMe2].

IT **19936-22-2**, 4-Cyclopentylbenzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 1-((5-aryl-1,2,4-oxadiazol-3-yl)benzyl)azetidine-3-carboxylates and -pyrrolidine-3-carboxylates as **EDG** receptor agonists)

RN 19936-22-2 CAPLUS

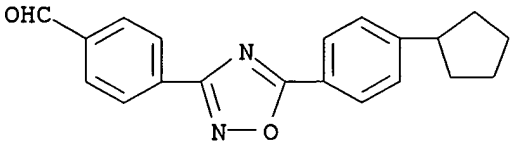
CN Benzoic acid, 4-cyclopentyl- (9CI) (CA INDEX NAME)



IT **635701-96-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 1-((5-aryl-1,2,4-oxadiazol-3-yl)benzyl)azetidine-3-carboxylates and -pyrrolidine-3-carboxylates as **EDG** receptor agonists)

RN 635701-96-1 CAPLUS

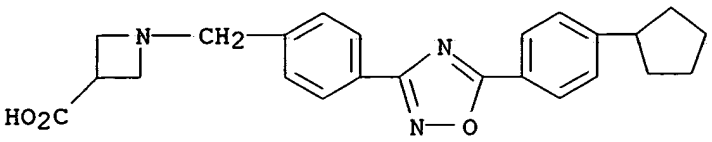
CN Benzaldehyde, 4-[5-(4-cyclopentylphenyl)-1,2,4-oxadiazol-3-yl]- (9CI) (CA INDEX NAME)



IT **635701-68-7P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1-((5-aryl-1,2,4-oxadiazol-3-yl)benzyl)azetidine-3-carboxylates and -pyrrolidine-3-carboxylates as **EDG** receptor agonists)

RN 635701-68-7 CAPLUS

CN 3-Azetidinecarboxylic acid, 1-[[4-[5-(4-cyclopentylphenyl)-1,2,4-oxadiazol-3-yl]phenyl]methyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:991699 CAPLUS
DOCUMENT NUMBER: 140:39513
TITLE: Signals and molecular species involved in senescence, detection of senescent cells and compositions for modulating cellular senescence
INVENTOR(S): Jang, Ik-soon; Yeo, Eui-ju; Park, Sang-chul
PATENT ASSIGNEE(S): Metabolic Engineering Laboratories Co., Ltd., S. Korea
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003104482	A1	20031218	WO 2002-KR1067	20020605
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			WO 2002-KR1067	20020605

AB The present invention relates to (a) a method for detecting a human senescent cell, which comprises measuring a relative alteration to young cell in a signal or mol. species involved in signal transduction triggered by platelet-derived growth factor or lysophosphatidic acid; (b) a method and a composition for modulating cellular senescence comprising treating a senescent cell with the effective amount of an inhibitor of adenylyl cyclase or an inhibitor of protein kinase A. The alteration in signal or mol. species is selected from the group consisting of: (a) a reduction in Ca2+ oscillation; (b) a reduction in expression of F-actin; (c) a reduction in activity of phospholipase C; (d) a reduction in activity of phospholipase D; (e) a reduction in expression or phosphorylation of platelet-derived growth factor receptor; (f) a reduction in phosphorylation of phospholipase C-γ1; (g) a reduction in expression of phospholipase D1; (h) a reduction in expression of **EDG** (endothelial differentiation gene)-2; (i) a reduction in expression of **EDG**-7; (j) a reduction in expression of Gi1; (k) a reduction in expression of Gi2; (l) a reduction in expression of Gi3; (m) an increase in activity or expression of adenylyl cyclase; (n) a reduction in activity or expression of phosphodiesterase; (o) an increase in activity of protein kinase C; (p) an increase in activity or

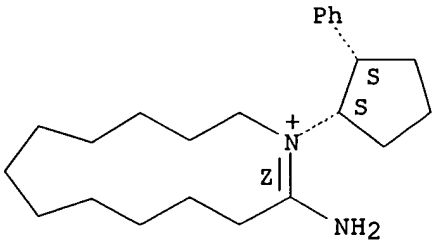
expression of protein kinase A; (q) an increase in phosphorylation of CREB; and (r) an increase in cAMP content.

IT **634907-88-3**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adenylyl cyclase inhibitor; signals and mol. species involved in senescence, detection of senescent cells and compns. for modulating cellular senescence)

RN 634907-88-3 CAPLUS

CN Azoniacyclotridec-1-ene, 2-amino-1-[(1R,2R)-2-phenylcyclopentyl]-, (1Z)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:491222 CAPLUS
DOCUMENT NUMBER: 139:69258
TITLE: Preparation of pyrazolopyridine derivatives as **Edg**-5 receptor antagonists
INVENTOR(S): Ozawa, Koichi; Hirata, Kazuyuki; Yamamoto, Kazuhiko
PATENT ASSIGNEE(S): Japan Tobacco Inc., Japan
SOURCE: PCT Int. Appl., 198 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003051876	A1	20030626	WO 2002-JP13059	20021213

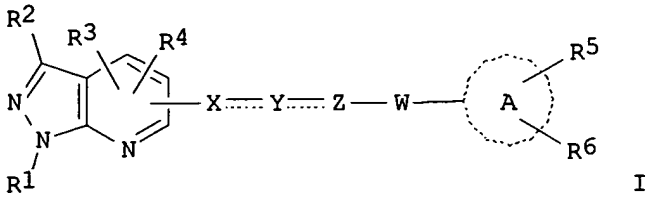
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2001-382398 A 20011214

JP 2002-225343 A 20020801

OTHER SOURCE(S): MARPAT 139:69258

GI



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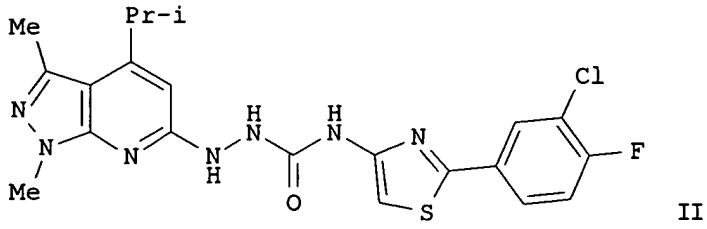


II

AB The title pyrazolopyridine derivs. with general formula of I [wherein R1 = H, (halo)alkyl, (un)substituted aryl, aralkyl, or COR7; R7 = alkyl, alkoxy, (un)substituted aryl, aralkyl, aryloxy, or aralkyloxy; R2 = H, (un)substituted alkyl, or aryl; R3 = H, alkoxy, alkoxy-CO, haloalkyl, cycloalkyl, (un)substituted alkyl, or aryl; R4 = H or (un)substituted alkyl; R5 = H, (cyclo)alkyl, alkoxy, alkoxy-CO, carboxy, alkynyl, halo, CN, NO2, haloalkyl, alkylamino, dialkylamino, acyl, OH, (un)substituted aryloxy, aralkyloxy, aryl, aralkyl, heterocyclyl, alkoxyalkyl, or CONHR8; R8 = (un)substituted aryl or aralkyl; R6 = H, (cyclo)alkyl, alkoxy, alkoxy-CO, carboxy, alkynyl, halo(alkyl), CN, NO2, alkylamino, dialkylamino, acyl, OH, (un)substituted aryloxy, aralkyloxy, aryl, aralkyl, heterocyclyl, alkoxyalkyl, or CONHR8; X = O, -N=, -CH=, (un)substituted -NH-, or -CH2-; Y = =N-, -CH2-, =CH-, -O-, -CO-, a bond, or (un)substituted -NH-; Z = CO, CS, CH2, O, or a bond; W = O, CO, CONH, CH2, NHCH2, a bond, or (un)substituted -NH-; ring A = aryl, heterocyclyl, or cycloalkyl] and prodrugs and pharmaceutically acceptable salts thereof are prepared For example, the compound II was prepared in a multi-step synthesis. II showed IC50 of 0.014 μM against hAGR16 in cow. I act specifically on endothelial differentiation sphingolipid G-protein-coupled (**Edg**) 5 which is a sphingosine-1-phosphate receptor and, therefore, are useful as remedies for fibrosis, arteriosclerosis, coronary vasospasm, asthma, nephritis, nerve disorder, peripheral nerve disorder, rheumatoid arthritis, systemic lupus erythematosus (SLE), cancer, etc.

IT **38363-32-5**, Penbutolol sulfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antihypertensive, sphingosine-1-phosphate receptor antagonist containing; preparation of pyrazolopyridine derivs. as **Edg**-5 receptor antagonists)

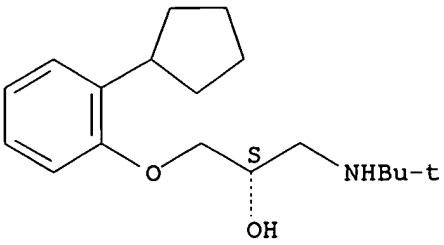
RN 38363-32-5 CAPLUS

CN 2-Propanol, 1-(2-cyclopentylphenoxy)-3-[(1,1-dimethylethyl)amino]-, (2S)-, sulfate (2:1) (salt) (9CI) (CA INDEX NAME)

CM 1

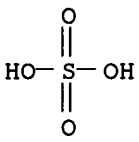
CRN 38363-40-5
CMF C18 H29 N O2

Absolute stereochemistry.



CM 2

CRN 7664-93-9
CMF H2 O4 S



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L15 41 SEA FILE=REGISTRY ABB=ON PLU=ON (635701-68-7/BI OR 19936-22-2/BI OR 635701-96-1/BI OR 160678-59-1/BI OR 352342-35-9/BI OR 357444-31-6/BI OR 372091-61-7/BI OR 372175-50-3/BI OR 374918-60-2/BI OR 376616-68-1/BI OR 376621-55-5/BI OR 38363-32-5/BI OR 634907-88-3/BI OR 753498-72-5/BI OR 800380-18-1/BI OR 801302-22-7/BI OR 801302-25-0/BI OR 801302-43-2/BI OR 801303-24-2/BI OR 801303-51-5/BI OR 801303-52-6/BI OR 832725-57-2/BI OR 832726-92-8/BI OR 832726-93-9/BI OR 832726-94-0/BI OR 832726-95-1/BI OR 832726-96-2/BI OR 832726-97-3/BI OR 864358-77-0/BI OR 864358-79-2/BI OR 864358-84-9/BI OR 864358-90-7/BI OR 864359-00-2/BI OR 864359-01-3/BI OR 864359-02-4/BI OR 864359-03-5/BI OR 864359-05-7/BI OR 864359-06-8/BI OR 868618-56-8/BI OR 868618-67-1/BI OR 868618-68-2/BI)

FILE 'CAOLD' ENTERED AT 12:18:38 ON 13 JAN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Searcher : Shears 571-272-2528

FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

L16 1 L15

L16 ANSWER 1 OF 1 CAOLD COPYRIGHT 2006 ACS on STN
AN CA52:18412i CAOLD
TI p-cyclopentylacetophenone and its derivs.
AU Hai, P. V.; Buu-Hoi, Ng. Ph.; Xuong, Ng. D.
IT 700-88-9 1536-16-9 **19936-22-2** 20029-53-2 56026-22-3
65429-17-6 65429-18-7 80649-39-4 85602-98-8 85689-77-6 100450-94-0
101116-39-6 101581-77-5 101728-12-5 101728-34-1 101728-45-4
101789-33-7 101789-35-9 101884-12-2 101889-75-2 102004-95-5
102016-04-6 102017-35-6 102160-87-2 102237-35-4 102237-50-3
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103279-65-8 106275-01-8 110052-67-0 110663-59-7 110664-10-3
110664-31-8 111029-72-2 111065-27-1 112578-58-2 113649-89-1
114889-54-2 115163-39-8 131977-11-2

FILE 'USPATFULL' ENTERED AT 12:18:47 ON 13 JAN 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 12 Jan 2006 (20060112/PD)
FILE LAST UPDATED: 12 Jan 2006 (20060112/ED)
HIGHEST GRANTED PATENT NUMBER: US6986161
HIGHEST APPLICATION PUBLICATION NUMBER: US2006010549
CA INDEXING IS CURRENT THROUGH 12 Jan 2006 (20060112/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 12 Jan 2006 (20060112/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

L17 9 S L15
L18 6 S L17 AND (EDG OR EDG1)

L18 ANSWER 1 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2005:281620 USPATFULL
TITLE: 1-((5-aryl-1,2,4-oxadiazol-3-yl) benzyl)azetidine-3-carboxylates and 1-((5-aryl-1,2,4-oxadiazol-3-yl)benzyl) pyrrolidine-3-carboxylates as **edg** receptor agonists
INVENTOR(S): Chen, Weirong, Waltham, MA, UNITED STATES
Hale, Jeffrey J., Westfield, NJ, UNITED STATES

Li, Zhen, Scotch Plains, NJ, UNITED STATES
Lynch, Christopher L., Scotch Plains, NJ, UNITED STATES
Mills, Sander G., Scotch Plains, NJ, UNITED STATES
Neway, William E. III, Newtown, PA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005245575	A1	20051103	
APPLICATION INFO.:	US 2003-515192	A1	20030616	(10)
	WO 2003-US18852		20030616	
			20041119	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-389173P	20020617 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MERCK AND CO., INC, P O BOX 2000, RAHWAY, NJ, 07065-0907, US
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1
LINE COUNT: 2165
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention encompasses compounds of Formula I: as well as the pharmaceutically acceptable salts and hydrates thereof. The compounds are useful for treating immune mediated diseases and conditions, such as bone marrow, organ and tissue transplant rejection. Pharmaceutical compositions and methods of use are included.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 2 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2005:17326 USPATFULL
TITLE: Immunosuppressant compounds and compositions
INVENTOR(S): Pan, Shifeng, San Diego, CA, UNITED STATES
Gao, Wenqi, San Diego, CA, UNITED STATES
Gray, Nathanael S., San Diego, CA, UNITED STATES
Mi, Yuan, San Diego, CA, UNITED STATES
Fan, Yi, San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S): IRM LLC (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005014728	A1	20050120	
APPLICATION INFO.:	US 2004-849323	A1	20040519	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-471931P	20030519 (60)
	US 2004-561968P	20040414 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GENOMICS INSTITUTE OF THE, NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SUITE E225, SAN DIEGO, CA, 92121-1127
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1

LINE COUNT: 1673
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to immunosuppressant, process for their production, their uses and pharmaceutical compositions containing them. The invention provides a novel class of compounds useful in the treatment or prevention of diseases or disorders mediated by lymphocyte interactions, particularly diseases associated with **EDG** receptor mediated signal transduction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 3 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2005:17323 USPATFULL
TITLE: Immunosuppressant compounds and compositions
INVENTOR(S): Mi, Yuan, San Diego, CA, UNITED STATES
Pan, Shifeng, San Diego, CA, UNITED STATES
Gray, Nathanael S., San Diego, CA, UNITED STATES
Gao, Wenqi, San Diego, CA, UNITED STATES
Fan, Yi, Poway, CA, UNITED STATES
Jiang, Tao, San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S): IRM LLC, Hamilton, BERMUDA (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005014725	A1	20050120	
APPLICATION INFO.:	US 2004-849458	A1	20040519	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-471931P	20030519 (60)
	US 2004-562183P	20040414 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GENOMICS INSTITUTE OF THE, NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SUITE E225, SAN DIEGO, CA, 92121-1127
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
LINE COUNT: 2113
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to immunosuppressant, process for their production, their uses and pharmaceutical compositions containing them. The invention provides a novel class of compounds useful in the treatment or prevention of diseases or disorders mediated by lymphocyte interactions, particularly diseases associated with **EDG** receptor mediated signal transduction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 4 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2005:17322 USPATFULL
TITLE: Immunosuppressant compounds and compositions
INVENTOR(S): Marsilje, Thomas H., San Diego, CA, UNITED STATES
Gray, Nathanel S., San Diego, CA, UNITED STATES
Jiang, Tao, San Diego, CA, UNITED STATES
Lu, Wenshuo, San Diego, CA, UNITED STATES
Pan, Shifeng, San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S): IRM LLC, a Delaware Limited Liability Company, Hamilton, BERMUDA (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005014724	A1	20050120	
APPLICATION INFO.:	US 2004-849079	A1	20040519	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2003-471931P	20030519	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GENOMICS INSTITUTE OF THE, NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SUITE E225, SAN DIEGO, CA, 92121-1127
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 1386
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to immunosuppressant, process for their production, their uses and pharmaceutical compositions containing them. The invention provides a novel class of compounds useful in the treatment or prevention of diseases or disorders mediated by lymphocyte interactions, particularly diseases associated with **EDG** receptor mediated signal transduction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 5 OF 6 USPATFULL on STN
ACCESSION NUMBER: 2005:11651 USPATFULL
TITLE: Immunosuppressant compounds and compositions
INVENTOR(S): Pan, Shifeng, San Diego, CA, UNITED STATES
Gray, Nathanael S., San Diego, CA, UNITED STATES
Mi, Yuan, UNITED STATES
Fan, Yi, UNITED STATES
Gao, Wengi, San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S): IRM LLC, a Delaware Limited Liability Company, Hamilton, BERMUDA (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005009786	A1	20050113	
APPLICATION INFO.:	US 2004-849450	A1	20040519	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2003-471931P	20030519	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GENOMICS INSTITUTE OF THE, NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SUITE E225, SAN DIEGO, CA, 92121-1127
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
LINE COUNT: 1208
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to immunosuppressant, process for their production, their uses and pharmaceutical compositions containing them. The invention provides a novel class of compounds useful in the treatment or prevention of diseases or disorders

mediated by lymphocyte interactions, particularly diseases associated with **EDG** receptor mediated signal transduction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 6 OF 6 USPATFULL on STN

ACCESSION NUMBER:	2004:190789 USPATFULL
TITLE:	Methods of treating conditions associated with an **EDG**-1 receptor
INVENTOR(S):	Solow-Cordero, David, San Francisco, CA, UNITED STATES Shankar, Geetha, Palo Alto, CA, UNITED STATES Spencer, Juliet V., San Mateo, CA, UNITED STATES Gluchowski, Charles, Danville, CANADA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004147562	A1	20040729	
APPLICATION INFO.:	US 2003-621966	A1	20030717	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-397299P	20020718 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004
NUMBER OF CLAIMS:	50
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	10 Drawing Page(s)
LINE COUNT:	2783

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In one aspect, the present invention provides a method of modulating an **Edg**-1 receptor mediated biological activity in a cell. A cell expressing the **Edg**-1 receptor is contacted with a modulator of the **Edg**-1 receptor sufficient to modulate the **Edg**-1 receptor mediated biological activity. In another aspect, the present invention provides a method for modulating an **Edg**-1 receptor mediated biological activity in a subject. A therapeutically effective amount of a modulator of the **Edg** -1 receptor is administered to the subject.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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FILE 'BIOSIS' ENTERED AT 12:19:25 ON 13 JAN 2006

FILE 'EMBASE' ENTERED AT 12:19:25 ON 13 JAN 2006

L19 761 S L15
L20 0 S L19 AND (EDG OR EDG1)

FILE 'HOME' ENTERED AT 12:19:49 ON 13 JAN 2006

=> d que stat l8; d que stat l12; d his ful
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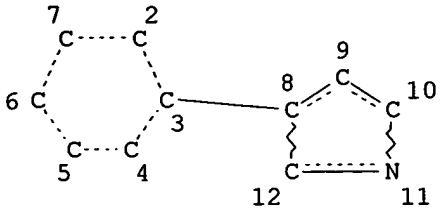

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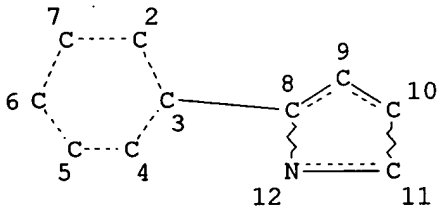
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L2 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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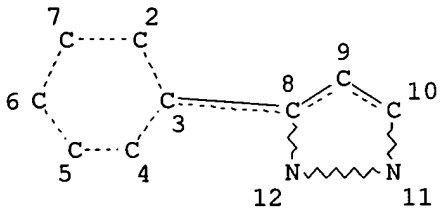
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L3 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
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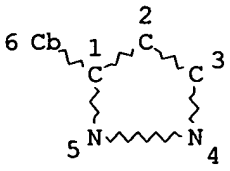
L5 STR



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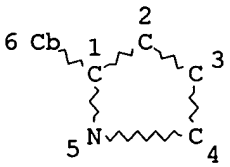
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
L6 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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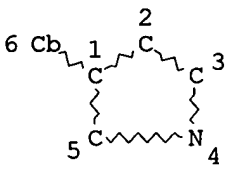
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
L7 STR



NODE ATTRIBUTES:
CONNECT IS X2 RC AT 6
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

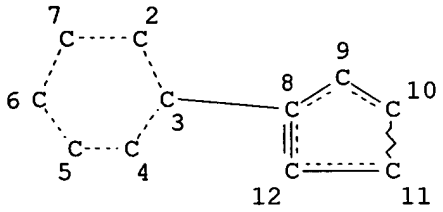
GRAPH ATTRIBUTES:
RSPEC I

NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
L8 51889 SEA FILE=REGISTRY SUB=L4 SSS FUL (L7 OR L6 OR L5)

100.0% PROCESSED 82088 ITERATIONS 51889 ANSWERS
SEARCH TIME: 00.00.02

L9 STR



NODE ATTRIBUTES:
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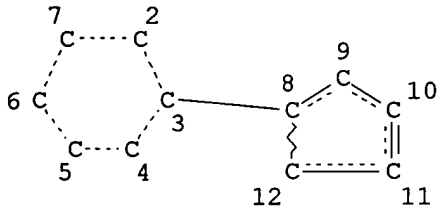
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

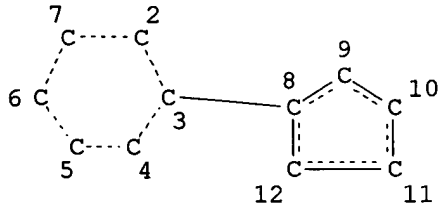
STEREO ATTRIBUTES: NONE
L10 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L11 STR



```
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L12       27032 SEA FILE=REGISTRY SSS FUL L9 OR L10 OR L11

100.0% PROCESSED 1178898 ITERATIONS                      27032 ANSWERS
SEARCH TIME: 00.00.17



     (FILE 'REGISTRY' ENTERED AT 12:00:28 ON 13 JAN 2006)
                DEL HIS Y
                D COST

     FILE 'REGISTRY' ENTERED AT 12:14:06 ON 13 JAN 2006
                ACT GEMB2/A
               ---------
L1              STR
L2              STR
L3              STR
L4   (     82088)SEA SSS FUL L1 OR L2 OR L3
L5              STR
L6              STR
L7              STR
L8        51889 SEA SUB=L4 SSS FUL (L7 OR L6 OR L5)
               ---------
                ACT GEMB62196/A
               ---------
L9              STR
L10             STR
L11             STR
L12       27032 SEA SSS FUL L9 OR L10 OR L11
               ---------

     FILE 'CAPLUS' ENTERED AT 12:14:55 ON 13 JAN 2006
L13       18908 SEA ABB=ON  PLU=ON  L8 OR L12
L14          11 SEA ABB=ON  PLU=ON  L13 AND (EDG OR EDG1)

     FILE 'REGISTRY' ENTERED AT 12:16:02 ON 13 JAN 2006
                D QUE STAT L8
                D QUE STAT L12

     FILE 'CAPLUS' ENTERED AT 12:16:03 ON 13 JAN 2006
                SEL HIT L14 1-11 RN
                D 1-11 IBIB ABS HITSTR

     FILE 'REGISTRY' ENTERED AT 12:18:00 ON 13 JAN 2006
L15          41 SEA ABB=ON  PLU=ON  (635701-68-7/BI OR 19936-22-2/BI OR
                635701-96-1/BI OR 160678-59-1/BI OR 352342-35-9/BI OR
                357444-31-6/BI OR 372091-61-7/BI OR 372175-50-3/BI OR
                374918-60-2/BI OR 376616-68-1/BI OR 376621-55-5/BI OR
```

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                38363-32-5/BI OR 634907-88-3/BI OR 753498-72-5/BI OR
                800380-18-1/BI OR 801302-22-7/BI OR 801302-25-0/BI OR
                801302-43-2/BI OR 801303-24-2/BI OR 801303-51-5/BI OR
                801303-52-6/BI OR 832725-57-2/BI OR 832726-92-8/BI OR
                832726-93-9/BI OR 832726-94-0/BI OR 832726-95-1/BI OR
                832726-96-2/BI OR 832726-97-3/BI OR 864358-77-0/BI OR
                864358-79-2/BI OR 864358-84-9/BI OR 864358-90-7/BI OR
                864359-00-2/BI OR 864359-01-3/BI OR 864359-02-4/BI OR
                864359-03-5/BI OR 864359-05-7/BI OR 864359-06-8/BI OR
                868618-56-8/BI OR 868618-67-1/BI OR 868618-68-2/BI)
                D QUE

     FILE 'CAOLD' ENTERED AT 12:18:38 ON 13 JAN 2006
L16             1 SEA ABB=ON  PLU=ON  L15
                D

     FILE 'USPATFULL' ENTERED AT 12:18:47 ON 13 JAN 2006
L17             9 SEA ABB=ON  PLU=ON  L15
L18             6 SEA ABB=ON  PLU=ON  L17 AND (EDG OR EDG1)
L*** DEL        0 S L17 AND EDGI
                D 1-6 IBIB ABS

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 12:19:25 ON 13 JAN 2006
L19           761 SEA ABB=ON  PLU=ON  L15
L20             0 SEA ABB=ON  PLU=ON  L19 AND (EDG OR EDG1)

     FILE 'HOME' ENTERED AT 12:19:49 ON 13 JAN 2006
                D QUE STAT L8
                D QUE STAT L12


     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   11 JAN 2006  HIGHEST RN 871792-80-2
     DICTIONARY FILE UPDATES:  11 JAN 2006  HIGHEST RN 871792-80-2

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.

     ************************************************************
     *                                                          *
     * The CA roles and document type information have been removed from *
     * the IDE default display format and the ED field has been added,   *
     * effective March 20, 2005.  A new display format, IDERL, is now    *
     * available and contains the CA role and document type information. *
     *                                                          *
     ************************************************************

     Structure search iteration limits have been increased.  See HELP SLIMI
     for details.

     REGISTRY includes numerically searchable data for experimental and
     predicted properties as well as tags indicating availability of
```

experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE CAPLUS

FILE COVERS 1907 - 13 Jan 2006 VOL 144 ISS 4
FILE LAST UPDATED: 12 Jan 2006 (20060112/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply They are available for your review at:

http://www.cas.org/infopolicy.html

FILE CAOLD
FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 12 Jan 2006 (20060112/PD)
FILE LAST UPDATED: 12 Jan 2006 (20060112/ED)
HIGHEST GRANTED PATENT NUMBER: US6986161
HIGHEST APPLICATION PUBLICATION NUMBER: US2006010549
CA INDEXING IS CURRENT THROUGH 12 Jan 2006 (20060112/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 12 Jan 2006 (20060112/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

FILE MEDLINE
FILE LAST UPDATED: 12 JAN 2006 (20060112/UP). FILE COVERS 1950 TO DA

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 will soon be available. For details

on the 2005 reload, enter HELP RLOAD at an arrow promt (=>).
See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_med_data_changes.ht
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_2006_MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 11 January 2006 (20060111/ED)

FILE EMBASE
FILE COVERS 1974 TO 12 Jan 2006 (20060112/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE HOME